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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|             |                                 |   |             |                  |
|-------------|---------------------------------|---|-------------|------------------|
| Applicant:  | Chia-Lin Chen, et al.           | § | Docket No.: | 24061.42         |
|             |                                 | § |             | (TSMC2002-1015)  |
| Serial No.: | 10/712,460                      | § |             |                  |
|             |                                 | § | Examiner:   | To Be Determined |
| Filed:      | November 13, 2003               | § |             |                  |
|             |                                 | § | Art Unit:   | 1746             |
| For:        | Semiconductor Wafer             | § |             |                  |
|             | Manufacturing Methods Employing | § | Conf. No.:  | 9316             |
|             | Cleaning Delay Period           | § |             |                  |

TRANSMITTAL

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified patent application.

1. Power of Attorney for Patent Application with copy of executed Assignment; and
2. Return Receipt Postcard

Applicant believes no fee is due. However, the Director is authorized to charge any deficiency fees or credit any overpayments to Deposit Account No. 08-1394 of Haynes and Boone, LLP.

Respectfully submitted,

*T. F. Bliss*

Timothy F. Bliss  
Reg. No. 50,925

Date: 5/25/04

HAYNES AND BOONE, LLP  
901 Main Street, Suite 3100  
Dallas, Texas 75202-3789  
Telephone: 972-739-8638  
Facsimile: 214-200-0853

Customer Number: 42717

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below:

*Dayle Conner*  
Name

5-25-04  
Date



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|   |   |                      |                  |
|---|---|----------------------|------------------|
| In re application of:                   | § | Attorney Docket No.: | 24061.42         |
| Chia-Lin Chen, et al.                   | § |                      | TSMC2002-1015    |
| Serial No.:                             | § | Customer No.:        | 27683            |
| 10/712,460                              | § |                      |                  |
| Filed:                                  | § | Group Art Unit:      | 1746             |
| November 13, 2003                       | § |                      |                  |
| For:                                    | § | Examiner:            | To Be Determined |
| Semiconductor Wafer Manufacturing       | § |                      |                  |
| Methods Employing Cleaning Delay Period | § |                      |                  |

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

POWER OF ATTORNEY FOR PATENT APPLICATION

As a representative of the Assignee, Taiwan Semiconductor Manufacturing, Co. Ltd., I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David L. McCombs (Reg. No. 32,271); Jeffrey M. Becker (Reg. No. 35,442); James R. Bell (Reg. No. 26,528); Timothy F. Bliss (Reg. No. 50,925); Randall C. Brown (Reg. No. 31,213); Randall E. Colson (Reg. No. 40,566); Michael A. Davis, Jr. (Reg. No. 35,488); Andrew S. Ehmke (Reg. No. 50,271); Priscilla Ferguson (Reg. No. 42,531); Sarah T. Harris (Reg. No. 35,891); William E. Hickman (Reg. No. 46,771); David R. Hofman (Reg. No. P-55,727); Rita M. Irani (Reg. No. 31,028); Wei Wei Jeang (Reg. No. 33,305); Warren B. Kice (Reg. No. 22,732); J. Andrew Lowes (Reg. No. 40,706); Todd Mattingly (Reg. No. 40,298); Julie Nickols (Reg. No. 50,826); Gloria Norberg (Reg. No. 36,706); David M. O'Dell (Reg. No. 42,044); Richard V. Wells (Reg. No. 53,757); and Chien Wei Chou (Reg. No. 41,672).

Please address all correspondence and telephone calls regarding this application to:

David M. O'Dell  
Attorney for Applicants  
Haynes and Boone, LLP  
901 Main Street, Suite 3100  
Dallas, TX 75202-3789  
972-739-8635

The undersigned is the representative for the Assignee of the entire right, title, and interest in the patent application identified above. A copy of the assignment or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is authorized to act on behalf of the Assignee.

Taiwan Semiconductor Manufacturing Company, Ltd.

Date

  
Chien-Wei Chou  
Title: Director, IP Division

Docket No. 24061.42 (TSMC2002-1015)  
Customer No. 27683

### ASSIGNMENT

WHEREAS, we,

- |     |                 |    |   |
|-----|-----------------|----|---|
| (1) | Chia-Lin Chen   | of | 5f, no. 111, Minshiang St.<br>Hsin-Chu, Taiwan 300<br>Republic of China                     |
| (2) | Tze-Liang Lee   | of | No. 6, Alley 1, Lane 158<br>Chang Chuen Street<br>Hsin-Chu, Taiwan 300<br>Republic of China |
| (3) | Shih-Chang Chen | of | 5f, no. 111, Minshiang St.<br>Hsin-Chu, Taiwan 300<br>Republic of China                     |

have invented certain improvements in

### SEMICONDUCTOR WAFER MANUFACTURING METHODS EMPLOYING CLEANING DELAY PERIOD

for which we have executed an application for Letters Patent of the United States of America, filed on November 13, 2003 and assigned application number 10/712,460; and

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China, is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

Docket No. 24061.42 (TSMC2002-1015)  
Customer No. 27683

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name: Chia-Lin Chen

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Dated: 05/13/04

Chia-Lin Chen.  
Inventor Signature

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Dated: 5/13/04

Tze-Liang Lee  
Inventor Signature

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Dated: 05/13/04

Shih-Chang Chen  
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